

IN THE CLAIMS

1. (Currently Amended) A method of AutoRun using a semiconductor storage device, the semiconductor storage device being coupled to a host computer having an operation system with an AutoRun mechanism, comprising:

1) the operation system of the host computer sending out an inquiry command to the semiconductor storage device for detecting a type of the device, wherein the semiconductor storage device includes at least one device;

2) the semiconductor storage device replying to the inquiry command from the operation system based on one or more predetermined device types;

3) the operation system of the host computer deeming the semiconductor storage device as one type of the predetermined device types according to the reply from the semiconductor storage device, and performing an operation accordingly; and

4) the AutoRun mechanism of the operation system searching for an AutoRun configuration file stored in the semiconductor storage device which simulates said deemed device type so that a specific file directed by the searched AutoRun configuration file can be executed by the operation system,

wherein an AutoRun program is preset in the semiconductor storage device coupled to the host computer ~~and capable of~~ for directing the specific file; and the AutoRun program is directed by the AutoRun configuration file, wherein the searching step comprises:

the operation system accessing the AutoRun configuration file stored in the semiconductor storage device to search for the AutoRun program, and starting a timing program with a predetermined timing value, wherein the predetermined timing value is based on a size of the specific file, the time estimated for executing the AutoRun program, and performance of the semiconductor device;

executing the AutoRun program to search for the specific file, copying the AutoRun program and the specific file to be executed to a host disk of the host computer;

the AutoRun program in the semiconductor storage device calling the copy of the AutoRun program in the host disk of the host computer to execute the copy of the specific file in the host disk of the host computer; and

the timing program sending out a reset command to the semiconductor storage device when elapsed time arrives at the predetermined timing value.

2. (Previously Amended) The method of Claim 1, wherein the semiconductor storage device is coupled to the host computer through an interface selected from the group consisting of a USB interface, a UWB interface, a blue-tooth interface, an IrDA infrared interface, a HomeRF interface, an IEEE 802.11a interface, an IEEE 802.11b interface, an IEEE 1394 Bus, an IDE Bus, a USB Bus, an LAN, and a WAN.

3. (Previously Amended) The method of Claim 1, wherein the predetermined device types, which are supported by the AutoRun mechanism of the operation system of the host computer, are selected from the group consisting of an optical disk drive, a host disk, a removable disk, a USB large volume disk, and a USB flash disk.

4. (Previously Amended) The method of Claim 3, wherein the optical disk is selected from the group consisting of a CD-ROM, a CD-RW, a DVD-ROM, a DVD-RW, a DVD-RAM, a blue laser DVD, and a red laser DVD.

5. (Original) The method of Claim 1, wherein said deemed type of the semiconductor storage device can be changed by inputting an indication from a command, buttoning, or programming; the semiconductor storage device is then preset as a preset type selected from the predetermined types according to the input indication, and after the semiconductor storage device is reset, the semiconductor storage device is coupled to the host computer as the preset type of device.

6. (Original) The method of Claim 1, wherein the predetermined device types can be defined as one or more device types based on related protocols; the semiconductor storage device can be coupled to the host computer as one device, or as more devices which are processed according to the device types, respectively.

7. (Original) The method of Claim 1, wherein the semiconductor storage device detects whether the AutoRun configuration file is present in a storage space of the semiconductor storage device; if the AutoRun configuration file is present, the semiconductor storage device is coupled to the host computer as a preset type; if the AutoRun configuration file is not present, the semiconductor storage device is coupled to the host computer as a conventional storage device.

8. (Previously Amended) The method of Claim 1, wherein the host computer can perform a conventional storage operation on the semiconductor storage device according to a user command.

9. (Original) The method of Claim 8, wherein the semiconductor storage device can perform the conventional storage operation according to a user command after the AutoRun mechanism of the operation system is activated, regardless of the execution of the specific file.

10. (Previously Amended) The method of Claim 9, wherein the conventional storage operation is a process based on a protocol according to a conventional device type of the semiconductor storage device, and the protocol is selected from the group consisting of UFI, SFF8020I, SCSI Transparent Command Set, Reduced Block Commands (RBC), T10 Project1240-D, ZIP disk and MO disk protocols.

11. (Currently Amended) A method of AutoRun using a semiconductor storage device, the semiconductor storage device being coupled with a host computer having an operation system with an AutoRun mechanism, comprising:

1) the operation system of the host computer sending out a first inquiry command to the semiconductor storage device for detecting the type of the device, the semiconductor storage device including at least one device;

2) the semiconductor storage device replying to the first inquiry command from the operation system that the device is an optical disk drive;

3) the operation system of the host computer deeming the semiconductor storage device as an optical disk based on the reply from the semiconductor storage device, and performing an operation accordingly; and

4) the AutoRun mechanism of the operation system searching for an AutoRun configuration file stored in the semiconductor storage device which simulates an optical disk drive so that a specific file directed by the AutoRun configuration file can be executed, the searching step comprising:

(4-1) the operation system sending out a second inquiry command to detect whether an optical disk is inserted into the optical disk drive when the semiconductor storage device is deemed to be an optical disk drive;

(4-2) in response to the second inquiry command, the semiconductor storage device, which simulates an optical disk drive, replying to the operation system after a predetermined delay, that an optical disk is already inserted into the optical disk drive so that the operation system can deem the semiconductor storage device as an optical disk with an optical disk; and

(4-3) the AutoRun mechanism of the operation system searching for the AutoRun configuration file stored in the semiconductor storage device which simulates the optical disk drive with an optical disk so that the operation system can execute the specific file directed by the AutoRun configuration file,

wherein an AutoRun program is preset in the semiconductor storage device coupled to the host computer and capable of ~~for~~ directing a specific file; and the AutoRun program is directed by the AutoRun configuration file, wherein the step (4-3) comprises:

the operation system accessing the AutoRun configuration file stored in the semiconductor storage device to search for the AutoRun program, and starting a timing program with a predetermined timing value, wherein the predetermined timing value is based on a size of the specific file, a time estimated for executing the AutoRun program, and performance of the semiconductor device; and

executing the AutoRun program in the semiconductor storage device to search for the specific file, copying the AutoRun program in the semiconductor storage device and the specific file to be executed to a host disk of the host computer;

the AutoRun program in the semiconductor storage device calling the copy thereof in the host disk of the host computer to execute the copy of the specific file in the ~~semiconductor storage device~~ host disk of the host computer.

12. (Canceled).

13. (Currently Amended) The method of Claim 11, wherein the step (4-3) further comprises:

the copy of the AutoRun program sending out a reset command to the semiconductor storage device; and

if the AutoRun program cannot successfully send out the reset command, the timing program sending out a reset command to the semiconductor storage device when elapsed time reaches the predetermined timing value.

14. (Previously Amended) The method of Claim 11, wherein the step (4-3) further comprises:

the timing program sending out a reset command to the semiconductor storage device when time reaches the predetermined timing value.

15. (Previously Amended) The method of Claim 11, wherein the predetermined timing value is set by a user or through a special software and/or program.

16. (Previously Amended) The method of Claim 11, further comprising the following steps for switching the semiconductor storage device to the conventional storage device after activating the AutoRun mechanism of the operation system in step 4), including:

5) resetting the semiconductor storage device;

6) replying that the semiconductor storage device is the conventional storage device when the operation system sends out the first inquiry command for detecting the type of the device;

7) the operation system of the host computer performing a configuration based on the reply from the semiconductor storage device; and

8) the operation system performing a conventional storage operation on the semiconductor storage device according to a user command.

17. (Original) The method of Claim 16, wherein said steps for switching the semiconductor storage device to a conventional storage device can be performed after activating the AutoRun mechanism of the operation system, regardless of the execution of the specific file.

18. (Previously Amended) The method of Claim 11, wherein the AutoRun mechanism of the operation system of the host computer supports an automatic execution of a file in the optical disk in the optical disk drive, and the optical disk drive is selected from the group consisting of a CD-ROM, a CD-RW, a DVD-ROM, a DVD-RW, a DVD-RAM, a blue laser DVD, and a red laser DVD.

19. (Previously Amended) The method of Claim 11, wherein a device type of the semiconductor storage device can be changed by inputting an indication from a command, buttoning, or programming; the semiconductor storage device is then preset as a preset type selected from the predetermined types according to the input indication, and after the semiconductor storage device is reset, the semiconductor storage device is coupled to the host computer as the preset type of device.

20. (Previously Amended) The method of Claim 11, wherein the host computer can perform a conventional storage operation on the semiconductor storage device according to a user command.

21. (New) The method of Claim 1, wherein the semiconductor device includes multiple devices, the operation system of the host computer sends out an inquiry commands to the multiple devices for detecting types of the devices, the multiple devices reply to the inquiry commands from the operation system based on one or more predetermined device types, the operation system of the host computer deems the multiple devices as one or more types of the predetermined device types according to the replies from the multiple devices and performs operations accordingly, and the AutoRun mechanism of the operation system searches for AutoRun configuration files stored in the multiple devices which simulate said deemed one or more device types so that specific files directed by the searched AutoRun configuration file can be executed by the operation system.

22. (New) The method of Claim 11, wherein the semiconductor device includes multiple devices, and the operation system of the host computer sends out first inquiry commands to the multiple devices for detecting the types of the devices, the multiple devices reply to the first inquiry commands from the operation system indicating which of the multiple devices are optical disk drives, the operation system of the host computer deems the multiple devices as optical disks based on the replies from the multiple devices and performs an operation accordingly, and the AutoRun mechanism of the operation system searches for AutoRun configuration files stored in the multiple devices which simulate an optical disk drive so that a specific files directed by the AutoRun configuration file can be executed.